

PHENIX WEEKLY PLANNING

4/10/2008

Don Lynch

Shutdown '08 Schedule

Purge Flammable Gas, Magnet & DAQ Tests	Done
Remove lock-out & open shield wall	Done
IR Crane certification	Done
Mu Trigger Review	Done, Action Items in progress
Disassemble & store shield wall & base	Done
New Beam Pipe Design Review	Done, Action Items in progress
Remove Collars	Done
Disconnect EC & move to AH	Done
Move MMS south	Done
RPC Prototype engineering & safety review	Done, Action Items in progress
CM Crane, MMN & sta. 1 scaffolding review	Done, Action Items in progress
RPC Prototype C tests (in tent)	in progress
Install/field fit CM access stairs	in progress
Move MMS North for survey	Done
RPC Gap 0 and 5 base survey	in progress
MuTr FEE upgrade/MuTr decaps WP	in progress
Move MMS and CM South	Apr. 14
Remove North access & MMN 4 lampshades	Apr. 14 - May 1

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Shutdown '08 Schedule, cont'd

Inventory/begin erect MMN scaffold	Apr. 14-May
PO for Station 1 scaffold (+ Central shops)	in progress
RPC Prototype D tests (in tent)	Apr-May
Design RPC installation fixtures & MuTrigger FEE platforms	Apr-May
MuTrgr Platform review	Apr 24?
Install Station 1 North scaffolding	May 1-16
Station 1 North decaps	May 19-30
RICH air control move to DC Rack	May 30
Prep work for Mutrgr platforms (water/elec)	May-June
Prep work for RPC proptotype install	May-June
move (7) MuID pipes	
move gap 5 south cable tray	
MMN decaps	May-July
End of run Party	May 30
Prep RPC Proto, MuTrggr FEE N&S Racks	Apr-July (Mike L., Frank)
Install CM Crane Channel Supports	June-Sept
RPC engineering & safety review	June
MuTrigger FEE N Install	July 1-31
HBD Install	July-August

Shutdown '08 Schedule, cont'd

RPC prototype gas system	July 1-31
Move shielding for RPC prototype installation	July 1-31 (C. Pearson)
RPC prototype cable routing & support	July 1-31 (M.Rau)
Modify crystal palace & vapor barrier	July 1-31 (C. Pearson)
Install MuTrigger FEE N platform	August 1-15
RPC prototype install	August (RPC3 - C. Pearson) (RPC2 - PHENIX)
Install RPC prototype rack in tunnel south	August (C. Pearson)
Install Mutrigger FEE's in MMS for RPC test	August
Install MuTrigger FEE South platform	August
Install MuTrgr N&S rack cooling & electric	August 1-29
Install MuTrigger N cooling water & air	August
Replace tunnel shielding	Sept (C. Pearson)
Connect electronics/gas/water/air for RPC	Sept.
Install MuTrigger N& S racks	Sept.
PC1 west work (needs planning)	Sept./Oct
DC East?/West Repairs	Oct.
Remove all inst'n equipment(e.g. scaffolds)	Oct.
Prep for shutdown 2009	Oct- Apr '09
Prep for run 9	Oct
Close shield wall start shifts	Nov.
Start physics	Dec.

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- Mu Trigger FEE N & S Done
- New Beampipe Review Done
- RPC Prototype 3/27 (informal engineering) Done
- CM Crane & MMN Scaffolding & Station 1 Scaffolding - Done
- MuTrigger N & S rack platform 4/24 (design in progress)
- RPC Stations 1, 2 and 3 ~ 6/1-6/30
- VTX/FVTX review ~ 6/1-8/31
- NCC Review ~ 6/1-8/31
- MMS scaffolding (< 2009)

Work Permit Requirements

- Standard Shutdown Commencement tasks (covered by approved procedures) Done
- MuTrigger FEE Upgrade (North & South) & MuTr Decaps, (including confined space for MMS & MMN and scaffold installation) in progress
- CM Crane Installation
- RPC Prototype Installation
- HBD re-installation
- MuTrigger FEE rack platform installation
- PC1 Repairs
- (More will be needed - to be added to the list as appropriate)

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CM Access



Technical Support 80022008

04/10/08

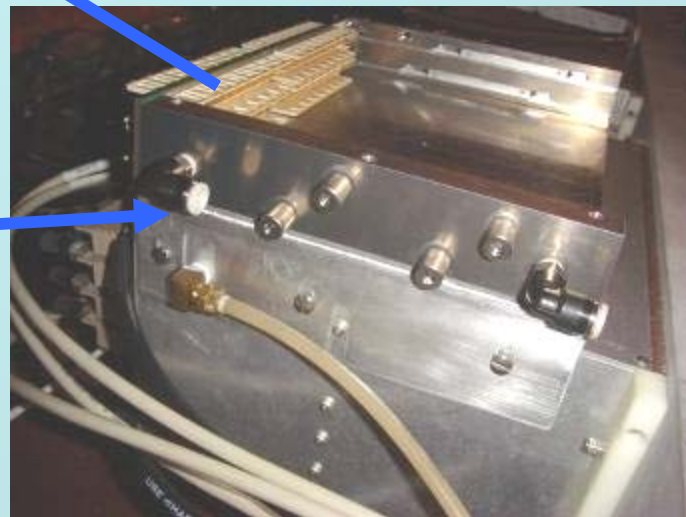
MuTrigger FEE



C-A Safety review done

Action items:

- Test the ADTX board w/o cooling under the above failure condition to determine the maximum temperature the voltage controller reaches.
- Check the cable tray rating of the proposed low voltage cable.
- Present the scaffolding design to an ESRC review (Done)
- Present the platform design to an ESRC review.

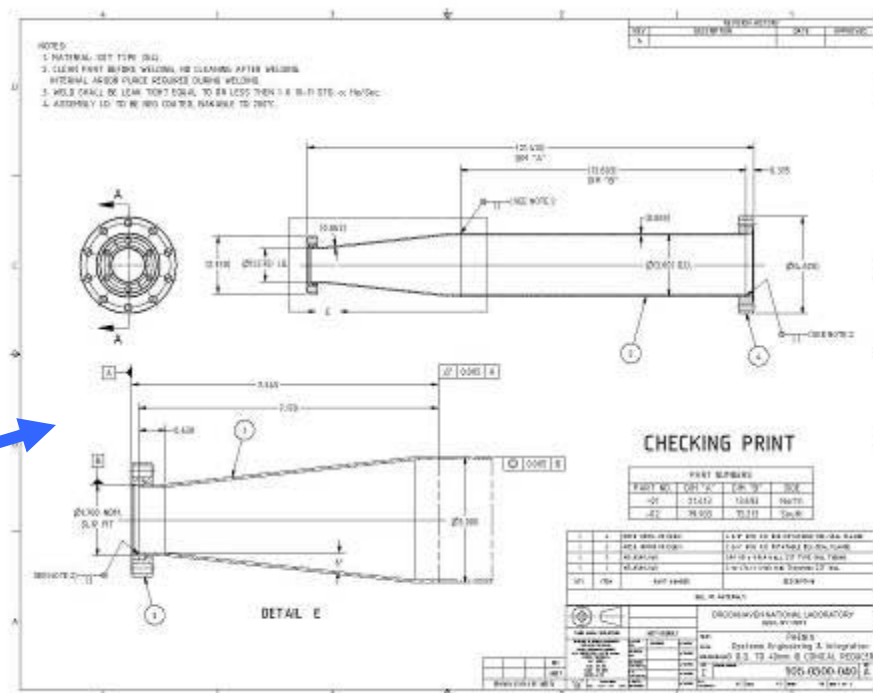


04/10/08



1-5/8" to 3" transitions

Drawings Done, C-A getting Quotes for NEG coating



RPC Prototype Review

Productive meeting

Many action items



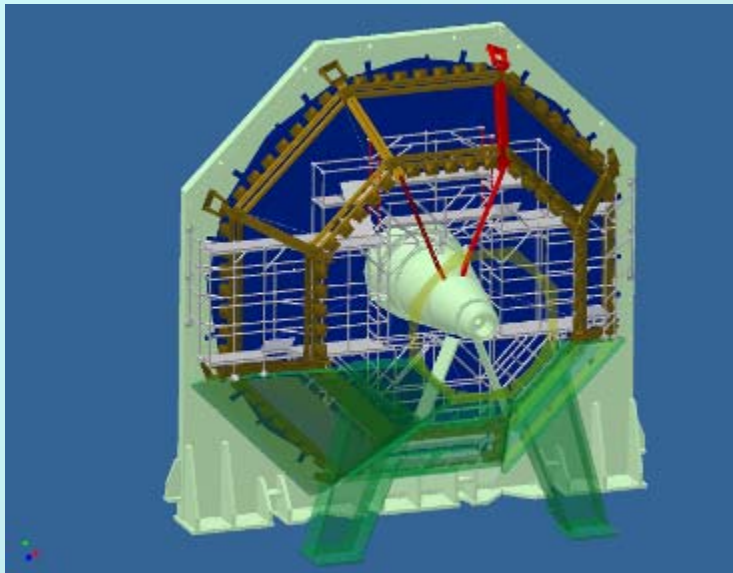
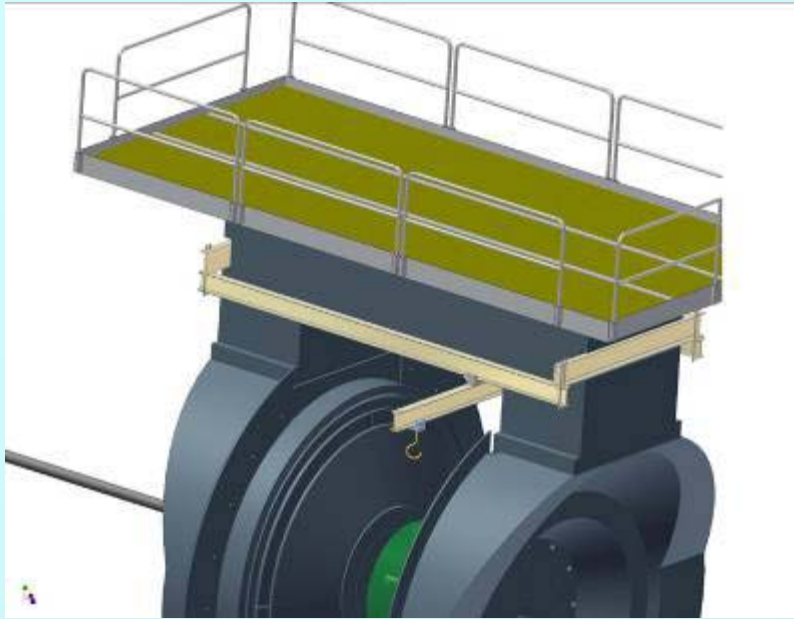
TECHNICAL SUPPORT + NOOB

04/10/08

Combined CM Crane, MMN & Station 1 scaffolding Review

PHENIX

TECHNICAL SUPPORT NO. 8



Action Items received. Action is in progress

04/10/08

South Tunnel, East Side

MuID pipes, (4) 1" and (3) $\frac{1}{2}$ " pipes
~3.5" off gap 5 steel



South Tunnel, West Side



Access to pedestal is ~170". 90" pedestal to west wall. Enough room for 3 full racks with 30" door opening clearance on all sides. 2 stacked close and 1 nearer to stairs. Cable tray on top?

IR, southeast Side



Gap 5 from southeast side
Pipes have ~6" clearance.
Probably OK

Cable tray < 2"
clearance - must be
moved to create 6"
clearance

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IR, southwest corner looking into gap 5

Floor in gap 5 is not
continuous, raised
areas are not flat
some junk is also
present

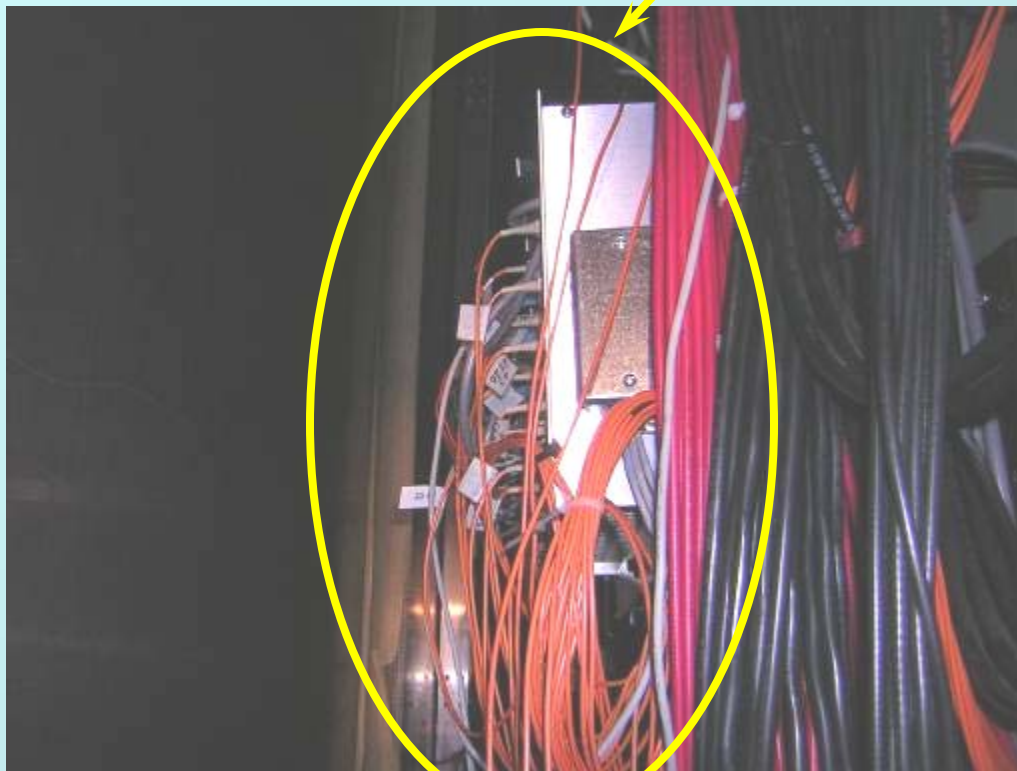


Limiting interferences:

1. Pipes against middle panel

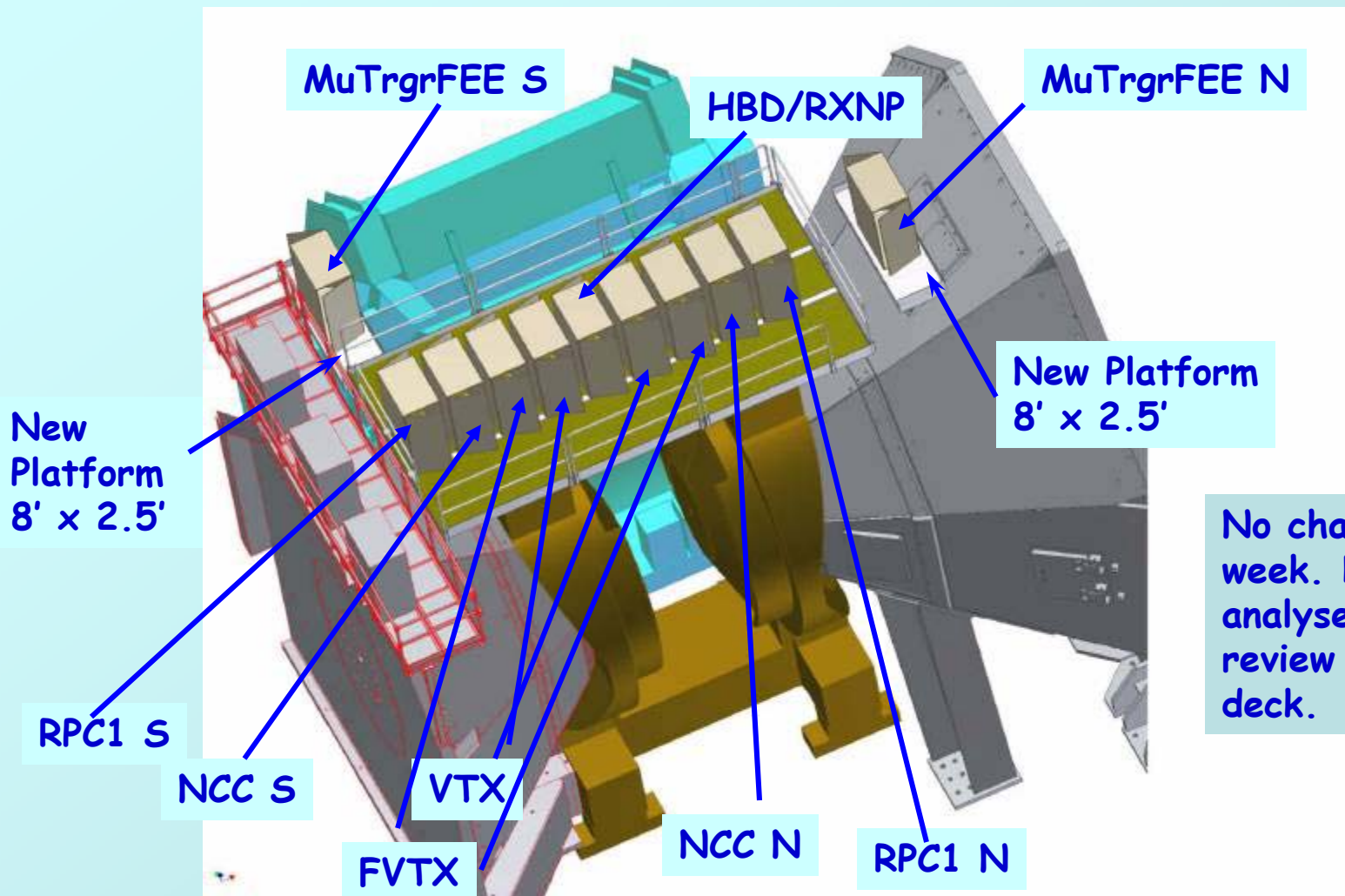
2. roller assembly touches cable tray

3. MuTr Crate & signal wires have 0 horizontal clearance to 1st plane of 1st MuID panel.
Probably O.K. if we don't move MMS full south after prototype is installed



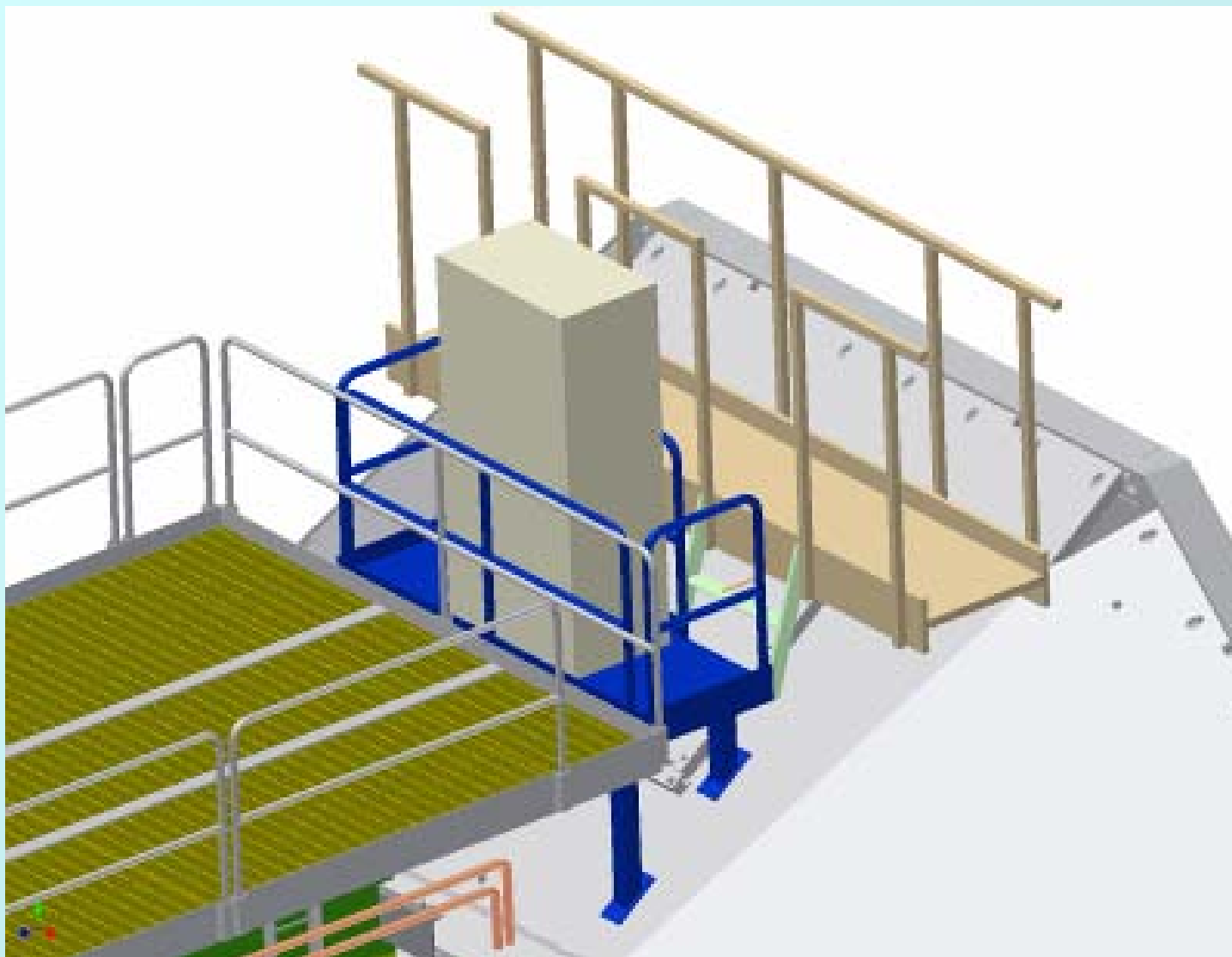
New Rack Allocations

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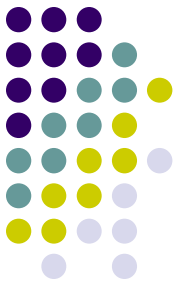


No changes this week. Design, analyses and review are on deck.

MuTrgr North FEE Rack Platform

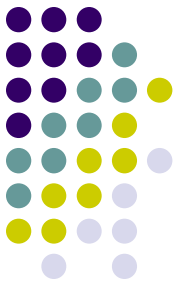


TECHNICAL SUPPORT NOON



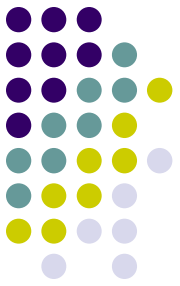
PHENIX EF&I Update

- MuTrig LV
- MuTrig clock distribution
- LeCroy / UVC high voltage
- Upgrade racks



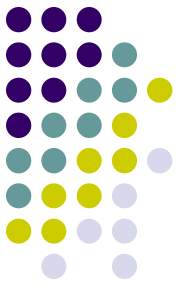
MuTrigger LV Distribution

- Distribution board, backplane and controller electronics design is completed.
- VME 6U 220mm format.
- Distribution board layout complete.
- Most board components have been ordered.
- Will need some machining of front panels.



MuTrigger Clock Distribution

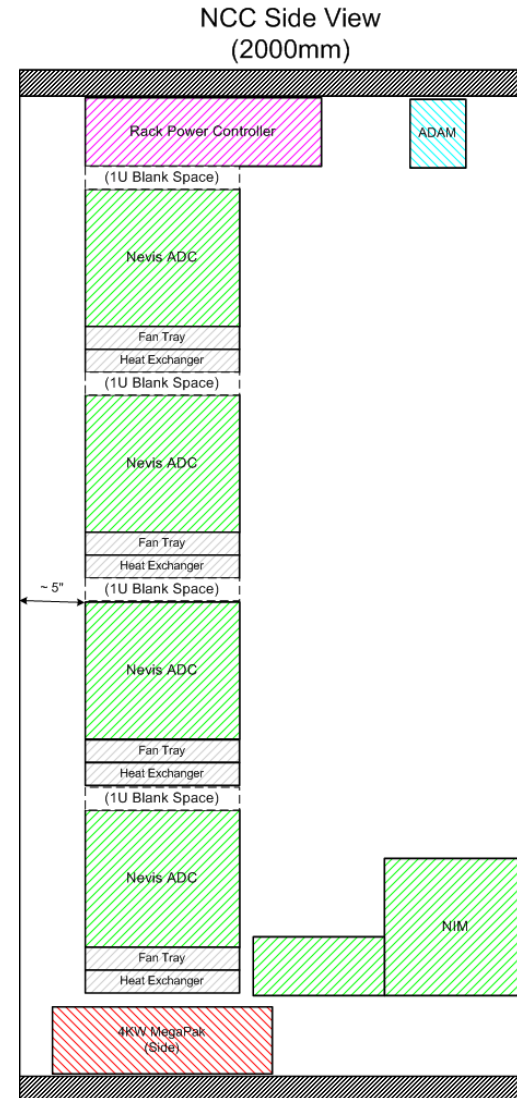
- 1:12 PECL-PECL Clock Fanout and 1:12 PECL-Optical Fanout electronics designs are complete.
- VME 6U 160mm format.
- Will use same backplane as LV distribution.
- Most components have been ordered but will need 432 total optical transceivers (about ½ that for this year).
- Will need some machining of front panels.



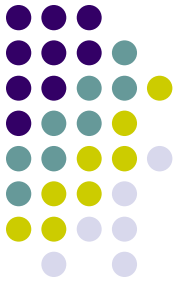
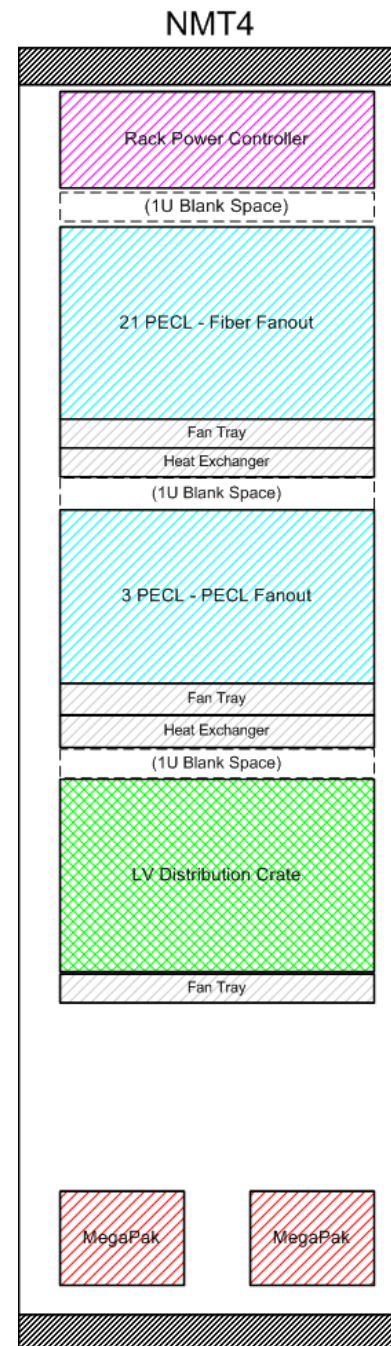
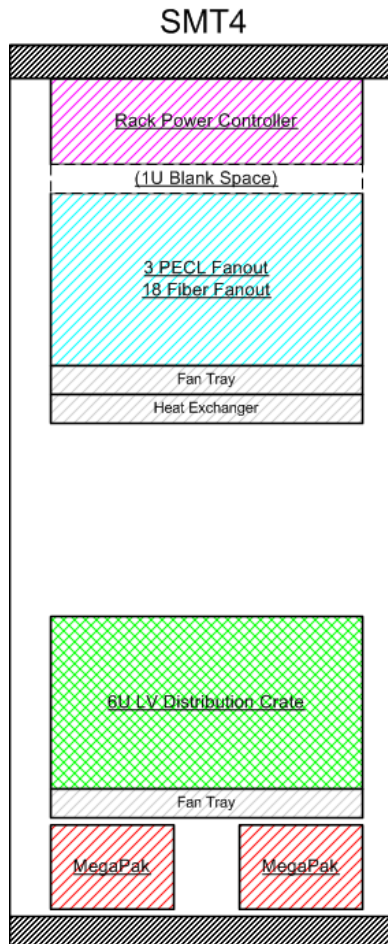
LeCroy / UVC High Voltage

- Mazsi continues development of mainframe controller upgrade.
- Sal P has repaired many modules but they need calibration. UVC says about 8 week turnaround.
- Sal P is building the rest of the HBD LeCroy HV protection system.

Racks magically got bigger (?) but still a challenge.



MuTrigger Racks



Prototype C tests underway

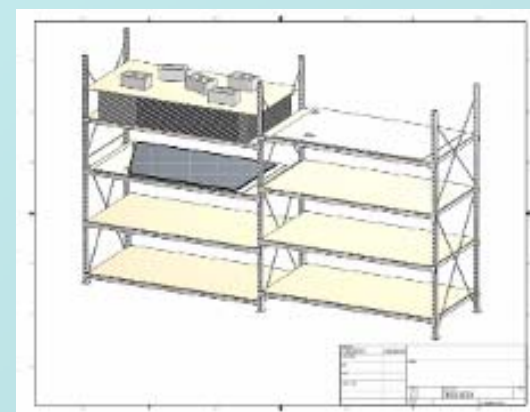
Prototype D in design/fabrication

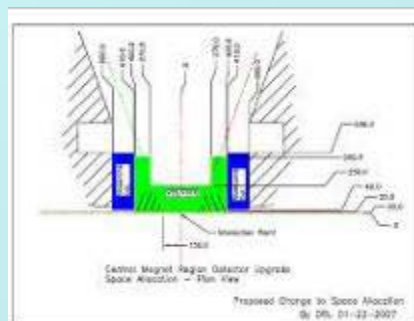
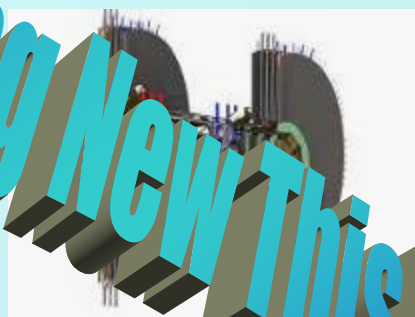
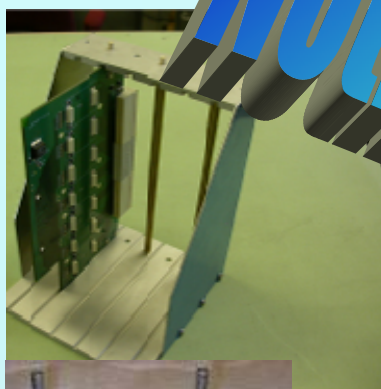
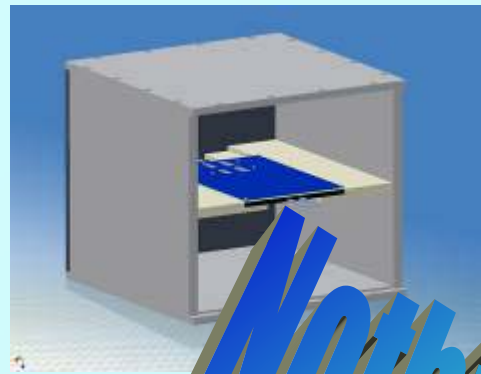
Additional equipment needed:

transport table

$\frac{1}{2}$ octant/module/gap storage racks

$\frac{1}{2}$ octant handling and transport fixtures





Other Work

- VTX, FVTX and NCC prototype support
 - Integration
 - Physical and Rack space
 - Infrastructure upgrades
- New Counting House Door
- VTX Prototype for run 8 ?

Nothing New This Week

Safety, Security, Etc. :

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Teamwork:

We are all responsible
for each others safety

Effort:





Planning:



Long Range Plan

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- 2008 Install stations 1& 2 of MuTr FEE upgrades (north), 1 octant Cu absorber (S), 1 half otants each RPC2/3 S, MMN sta. 2 scaffolding, MuTr Sta 1 N&S scaffolding, 1 octant of MuTrigger FEE upgrades (south, sta 1 & 2), MuTr N stn. 1 & 3 decaps, MuTrigger rack platforms (N&S), CM crane, remove/replace beampipe?, infrastructure upgrades & repairs, misc. subsystem work, 1 RPC rack in South tunnel, MuTrgr FEE N & S racks, re-install HBD
- 2009 Remove HBD & RXNP, scaffolding in MMS, MuTr S stn. 1 & 3 decaps, RPC2 N, RPC3 N, north Cu absorber, partial VTX, iFVTX, MuTrgr S sta 1 & 2, MuTrgr S rack, 2 racks in N tunnel, infrastructure upgrades & repairs, misc. subsystem work
- 2010 Remainder of VTX barrel, partial FVTX, south Cu absorber completed, MuTrgr FEE stn. 3 S, any remaining MuTr decaps, infrastructure upgrades & repairs, misc. subsystem work
- 2011 RPC1 N&S, NCC N, remainder of FVTX, DC West upgrade/repair, remove absorbers, infrastructure upgrades & repairs, misc. subsystem work
- 2012 NCC S, upgrades contingency & wishlist, infrastructure upgrades & repairs, misc. subsystem work, TBD new and improved upgrades

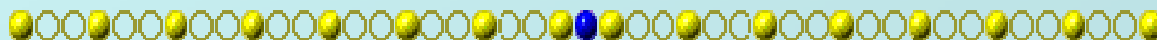
** Years refer to the shutdown year and follow the run with the similar number (i.e. work in 2008 is to be done in the shutdown that follows run 8, and so on)*

Where To Find PHENIX Engineering Info



Thinking "outside the locks"

Links for the weekly planning meeting slides, long term planning, pictures, videos and other technical info can be found on the web site:



http://www.phenix.bnl.gov/WWW/INTEGRATION/ME&Integration/DRL_SSint-page.htm